

Title (en)
INCANDESCENT-LIKE-DIMMING LIGHT EMITTING DIODE

Title (de)
LEUCHTDIODE MIT GLÜHLAMPENÄHNLICHER DIMMUNG

Title (fr)
DIODE ÉLECTROLUMINESCENTE À GRADATION SIMILAIRE À CELLE D'UNE LAMPE À INCANDESCENCE

Publication
EP 3180962 A4 20180328 (EN)

Application
EP 15832220 A 20150803

Priority
• US 201462036103 P 20140811
• US 2015043392 W 20150803

Abstract (en)
[origin: WO2016025208A1] Phosphor-converted light emitting diodes comprising a blue or near-UV emitting semiconductor device, a yellow-green phosphor, and a red phosphor exhibit incandescent-like dimming behavior in that the Correlated Color Temperature of a white light output decreases with reduced brightness. In one aspect, a light emitting device comprises an LEO emitting blue light, a first phosphor excited by the blue light emitted by the LED and in response emitting green or greenish-yellow light, and a second phosphor excited by the blue light emitted by the LED and in response emitting red light.

IPC 8 full level
C09K 11/61 (2006.01); **C09K 11/62** (2006.01); **C09K 11/78** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP US)
C09K 11/617 (2013.01 - EP US); **C09K 11/62** (2013.01 - EP US); **C09K 11/7774** (2013.01 - EP US); **H01L 33/32** (2013.01 - US); **H01L 33/504** (2013.01 - EP US); **H05B 45/20** (2020.01 - EP US); **Y02B 20/00** (2013.01 - EP US)

Citation (search report)
• [E] EP 2947382 A1 20151125 - SHINETSU CHEMICAL CO [JP]
• [X] US 2013063939 A1 20130314 - KONDO TAKASHI [JP], et al
• [X] US 8704440 B2 20140422 - ZHENG YI [US], et al
• [A] US 2013271960 A1 20131017 - HONG BYUNGCHUL [JP], et al
• See references of WO 2016025208A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2016025208 A1 20160218; EP 3180962 A1 20170621; EP 3180962 A4 20180328; EP 3180962 B1 20210526; JP 2017527114 A 20170914; US 2016372639 A1 20161222; US 9818916 B2 20171114

DOCDB simple family (application)
US 2015043392 W 20150803; EP 15832220 A 20150803; JP 2017507875 A 20150803; US 201615254734 A 20160901